

31
Conclude
planarization] polishing pad polishes a surface of the semiconductor wafer with the polishing slurry; and,

wherein said belt is formed of metal.

334. (Five Times Amended) A polishing pad assembly for polishing a semiconductor wafer, said assembly comprising:

a first roller;

at least one additional roller;

a belt forming a closed loop, which belt is mounted on said first roller and said at least one additional roller;

62
at least one non-[fixed] abrasive [chemical mechanical planarization] polishing pad mounted to said belt, the non-[fixed] abrasive [chemical mechanical planarization] polishing pad configured to receive a polishing slurry suitable for use in chemical mechanical planarization of the semiconductor wafer, wherein the non-[fixed] abrasive [chemical mechanical planarization] polishing pad polishes a surface of the semiconductor wafer with the polishing slurry; and

a drive system coupled to at least said first roller to rotate said first roller and to cause said belt and said non-[fixed] abrasive [chemical mechanical planarization] polishing pad to move in a path;

wherein said belt is formed of metal.

536. (Four Times Amended) A polishing pad assembly for polishing a semiconductor wafer, said assembly comprising:

a belt forming a closed loop; and

63
at least one non-[fixed] abrasive [chemical mechanical planarization] polishing pad mounted on the belt, the non-[fixed] abrasive [chemical mechanical planarization] polishing pad configured to receive a polishing slurry suitable for use in chemical mechanical planarization of the semiconductor wafer, wherein the non-[fixed] abrasive [chemical mechanical planarization] polishing pad polishes a surface of the semiconductor wafer with the polishing slurry;

wherein said belt comprises a polyurethane material.

6
37.

(Four Times Amended) A polishing pad assembly for polishing a semiconductor wafer, said assembly comprising:

a first roller;

at least one additional roller;

a belt forming a closed loop, which belt is mounted on said first roller and said at least one additional roller;

at least one non-[fixed] abrasive [chemical mechanical planarization] polishing pad mounted to said belt, the non-[fixed] abrasive [chemical mechanical planarization] polishing pad configured to receive a polishing slurry suitable for use in chemical mechanical planarization of the semiconductor wafer, wherein the non-[fixed] abrasive [chemical mechanical planarization] polishing pad polishes a surface of the semiconductor wafer with the polishing slurry; and

a drive system coupled to at least said first roller to rotate said first roller and to cause said belt and said non-[fixed] abrasive [chemical mechanical planarization] polishing pad to move in a path;

7
38.

wherein said belt comprises a polyurethane material.

(Four Times Amended) A polishing pad assembly for polishing a semiconductor wafer, said assembly comprising:

a belt forming a closed loop; and

at least one non-[fixed] abrasive [chemical mechanical planarization] polishing pad mounted on the belt, the non-[fixed] abrasive [chemical mechanical planarization] polishing pad configured to [adapted to] receive a polishing slurry suitable for use in chemical mechanical planarization of the semiconductor wafer, wherein the non-[fixed] abrasive [chemical mechanical planarization] polishing pad polishes a surface of the semiconductor wafer with the polishing slurry;

wherein said belt comprises a high-strength polymer.

9
40.

(Four Times Amended) A polishing pad assembly for polishing a semiconductor wafer, said assembly comprising:

a first roller;

at least one additional roller;

64 Conclusion
a belt forming a closed loop, which belt is mounted on said first roller and said at least one additional roller;

at least one non-[fixed] abrasive [chemical mechanical planarization] polishing pad mounted to said belt, the non-[fixed] abrasive [chemical mechanical planarization] polishing pad configured to receive a polishing slurry suitable for use in chemical mechanical planarization of the semiconductor wafer, wherein the non-[fixed] abrasive [chemical mechanical planarization] polishing pad polishes a surface of the semiconductor wafer with the polishing slurry; and

a drive system coupled to at least said first roller to rotate said first roller and to cause said belt and said non-[fixed] abrasive [chemical mechanical planarization] polishing pad to move in a path;

wherein said belt comprises a high-strength material.

Please add the following claim:

65
11/4. A method of polishing a semiconductor wafer comprising:
providing a polishing pad assembly, wherein said polishing pad assembly comprises a belt forming a closed loop, at least one non-abrasive polishing pad mounted on the belt, wherein the non-abrasive polishing pad is configured to receive a polishing slurry, and wherein said belt is formed of metal;

rotating the polishing pad assembly such that the at least one non-abrasive polishing pad mounted on the belt moves in a linear direction; and

polishing the semiconductor wafer by pressing the semiconductor wafer against the polishing pad assembly.

REMARKS

I. Interview and Office Action Summary

Claims 32, 34, and 36-43 are presently pending. Claims 32, 34, 36-38, and 40 are the independent claims.

In the Office Action dated May 8, 2000, the Examiner rejected claims 32, 34, 36-43 as indefinite under 35 U.S.C. §112, second paragraph. Claims 32, 34, and 36-43 were also rejected as obvious over the combination of the Hibbard, McGarvey, and Kirchner references.